Chapter III – Planning Issues, Opportunities, and Constraints

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INTRODUCTION

This chapter describes the key factors that influenced the development of the Resource Management Plan/Environmental Assessment (RMP/EA). Bureau of Reclamation (Reclamation) land use planning focuses on resolving issues that arise over the use and management of public lands and resources. An established planning process was followed for the preparation of the RMP/EA (see figure III-1). A planning issue can be defined as an unrealized opportunity, an unresolved conflict or problem, an effort to implement a new management program as a result of new initiatives or laws and regulations, an issue raised by the public, or a value being lost. Not all issues are related to resource management; therefore, not all issues are planning issues that can be resolved through an RMP/EA. Some issues must be resolved administratively. Issues concerning the conflicting demands for consumptive and nonconsumptive uses of the land have been identified. The basic challenge is to protect natural and heritage resource values while allowing uses that have a minimum effect on these resources. The key factors that influenced development of the RMP/EA resulted from the following two areas of investigation:

- Collection and review of existing resource data, including review and update of the information provided by a private consultant for the preparation of a draft RMP/EA in 1993 that was never finalized

- Public involvement and Reclamation review of internal programs and policies to identify issues, goals, and objectives

The planning issues, opportunities, and constraints identified in these investigations allowed Reclamation to formulate the necessary management actions and implementation strategies outlined in Chapter VI, Resource Management Plan. The environmental impacts of implementing the management actions are addressed in Chapter V, Affected Environment and Environmental Consequences.

PLANNING ISSUE IDENTIFICATION

To identify issues pertaining to the management of Canyon Ferry Reservoir, the RMP/EA planning effort incorporated a public involvement process, as described in chapter I. In

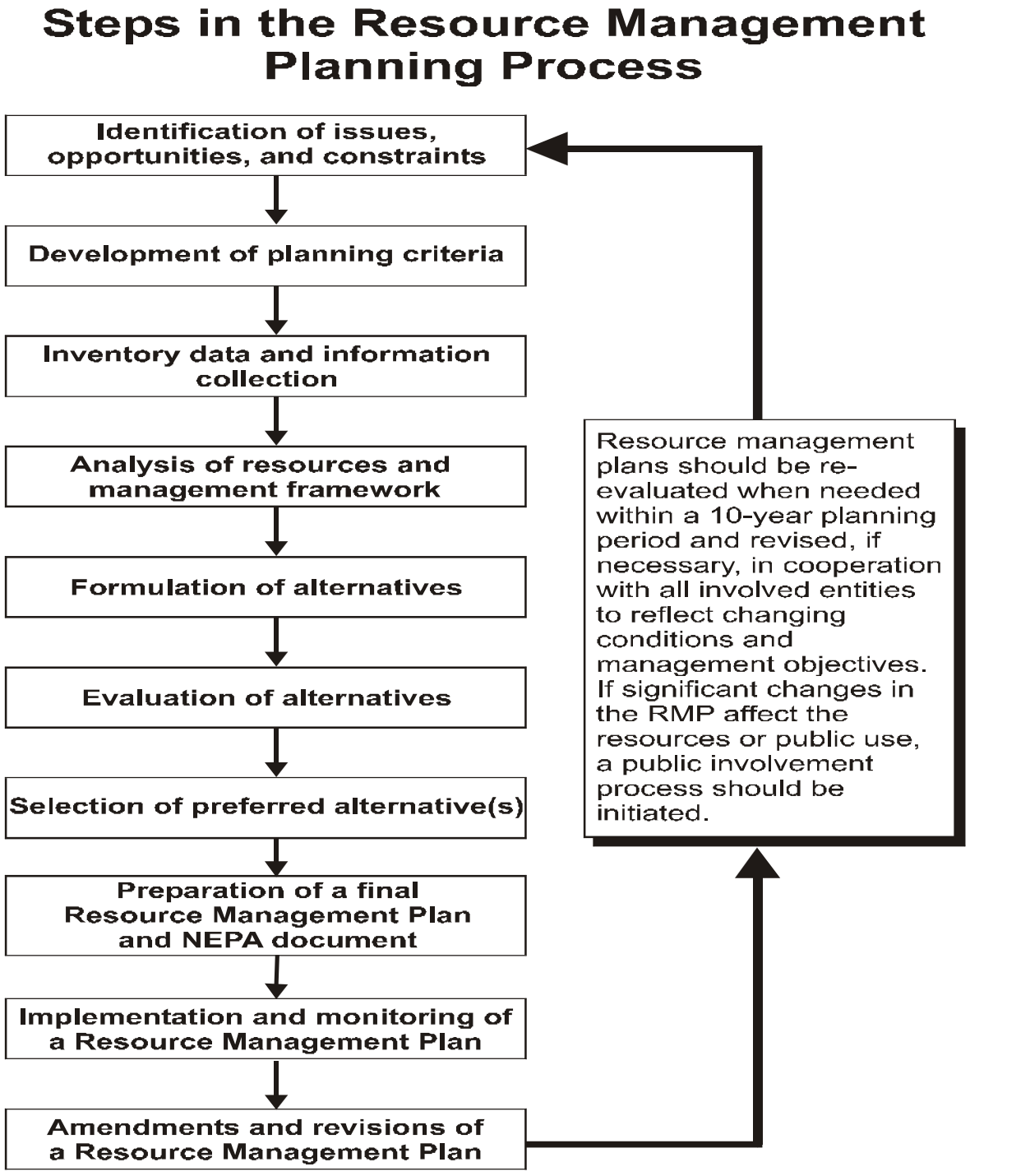

Figure III-1.—Steps in the resource management planning process.

addition, resource specialists and managers also reviewed Reclamation policies and procedures to identify issues and concerns. The variety of issues and concerns identified by Reclamation was similar to the variety of issues and concerns identified by the public. The issues and concerns were then grouped into issue categories. The general issue categories helped to (1) define the scope of each issue and concern and (2) develop specific goals and objectives to address each issue and concern. Eight issue categories were identified. Some issues, concerns, and comments expressed by the public were determined to be outside the scope of this RMP/EA and were not incorporated in an issue category. An explanation of why they were not considered further in this document is provided at the end of chapter IV. The seven issue categories addressed in this RMP/EA are:

- **R** Access management
- **R** Recreation management
- **R** Heritage resources
- **R** Health and safety
- **R** Wildlife resources
- **R** Public information
- **R** Land use

The description of each issue category follows.

Access Management

This issue category pertains to the need to provide better access to the reservoir area, closure of some access points, repair and maintenance of existing access routes, and signing of roads. It is Reclamation's intent to provide access for general public use, not to provide exclusive use for individuals or groups. Reclamation may consider realignment of roads and access to the reservoir from adjacent private lands.

Recreation Management

This issue category pertains to accommodating existing and future recreation demand, decreasing user conflict, dispersing users, and providing quality recreation opportunities, while protecting the environmental resources of the area.

Heritage Resources

This issue category pertains to the need to protect and provide for interpretation of these resources, which include historic, prehistoric, and paleontological sites.

Health and Safety

This issue category pertains to the posting of rules and regulations governing the use of the area; providing a safe, healthy, and enjoyable environment and experience for the visiting public; providing safe and usable facilities; and providing an acceptable level of law enforcement throughout the study area.

Wildlife Resources

This issue category pertains to preserving, protecting, and enhancing wildlife areas and, where appropriate, establishing additional Wildlife Management Areas (WMA) which support some level of recreation use. It also includes information pertaining to the bald eagle viewing program at Canyon Ferry Reservoir.

Public Information

This issue category pertains to providing a variety of public information about reservoir conditions and recreation opportunities through different media (e.g., Internet, brochures, radio, maps, and pamphlets).

Land Use

This issue category pertains to the need for weed control, bank stabilization, and concerns related to Reclamation's land use planning and the implications to adjacent landowners.

MANAGEMENT OPPORTUNITIES

This RMP offers opportunities to provide solutions to the issues and concerns raised by the public. Reclamation has determined that implementation of appropriate management actions is essential for the successful management of Canyon Ferry Reservoir resources. Implementation of an RMP can reverse any downward trends in the quality of natural resources within the study area and can create a positive visitor experience by meeting the needs and desires of the visitors to Canyon Ferry Reservoir.

Opportunities exist to enhance, protect, and interpret the unique historic resources of the area, such as the cemetery on Cemetery Island. There are also opportunities to provide a wide variety of recreation facilities and opportunities throughout the reservoir area, while not harming existing environmental resources.

Isolation from human disturbance is critical to the attractiveness of areas for waterfowl during the brood-rearing stage and spring and fall migrations. Some potential may exist to work with adjacent landowners to make their fields more productive for migrating waterfowl. Habitat for upland game birds could also be enhanced with the cooperation of area landowners.

A wildlife interpretive program, taking into account habitat protection and wildlife needs, could be developed around the reservoir and at the WMA in particular. This could include signing, disabled-accessible sites, naturalist tours, and walking and biking tours. The program could serve to diversify the attractions of the area, especially at the south end of the reservoir.

Cost-sharing opportunities with other Federal, State, and local entities could increase Reclamation's capability to successfully manage Canyon Ferry Reservoir. Public-private partnerships should be considered in future management strategies. Local organizations and citizen groups could directly or indirectly support management of the area. At a time when Federal, State, and local funding for recreation development and operation and maintenance is decreasing, public demand for outdoor recreation is increasing. The leveraging of funds through grants and cooperative agreements is important if land management agencies wish to meet this future demand. Following are three examples of funding and management opportunities available to Reclamation for management of the area.

Federal Assistance to Sport Fish Restoration Program

The Federal Assistance to Sport Fish Restoration Program, which includes the Wallop-Breaux Amendment, provides Federal funds to State game and fish departments to develop fishing access facilities, such as boat ramps, restrooms, courtesy docks, and parking areas. State game and fish departments will accept proposals from other entities to enhance fishing opportunities in the State. Federal funds supplied to the State pay 75 percent of the costs, and the other 25 percent is paid either by the State, another cost-share partner(s), or divided between partner(s). The fact that Reclamation is a Federal agency does not preclude it from requesting funds from the Montana Fish, Wildlife and Parks (MFWP) for fishing access facilities. If the need is justified, the State can fund the total cost of such improvements through the above-mentioned restoration program.

1998 Transportation Equity Act for the 21st Century (TEA-21)

Eligible projects under the Public Lands Highway Discretionary Fund include, but are not limited to, planning for Federal programs that benefit recreation development, parking,

interpretive signage, acquisition of certain lands, trails, roadside rest areas, and sanitary and waste facilities. Efforts to identify proposed projects should be coordinated between Federal, State, and local entities. Specifically, close coordination with the State and Federal highway departments should occur at the early stages of project identification and formulation.

Reclamation Recreation Management Act of 1992, Title 28

The Reclamation Recreation Management Act of 1992 is an amendment to the Federal Project Recreation Act of 1965, Public Law (P.L.) 89-72, that provides up to 50 percent Federal cost sharing for the planning and construction of recreation facilities with non-Federal public entities. It also provides 75 percent Federal cost sharing for fish and wildlife enhancement. Non-Federal public entities that have agreed to manage developed facilities and lands at Reclamation water projects work with local Reclamation offices to identify proposed projects for funding. Congressional funds are appropriated annually and distributed for selected projects.

Section 7(c) of P.L. 89-72 gives Reclamation clear authority to contract with other Federal agencies to manage Reclamation lands. However, the question is whether the other agencies have the inherent authority to do what Reclamation might ask them to do on Reclamation lands. The constraints to another Federal agency managing Reclamation lands are discussed below under "Federal Agency Constraints."

MANAGEMENT CONSTRAINTS

When addressing management changes and other actions, agencies are constrained by their respective legislative authorities, budgets, personnel, current policies, and environmental limitations. The policies affecting management have been discussed in Chapter II, Management Framework. The ability of land management agencies to manage environmental and recreational resources will always depend on maintaining sufficient personnel and on the ability of the agencies to obtain adequate funding to operate and maintain facilities and programs, as well as to protect and enhance existing opportunities and resources. The following discussion addresses the legislative and environmental constraints associated with the study area.

Legislative Constraints

When project planning and/or development are being considered on Federal land, there are rules, laws, and Executive orders that may be triggered. These include, but are not limited to, those previously mentioned in chapter II and the Clean Water Act, Clean Air Act, Americans

with Disabilities Act, and the National Environmental Policy Act (NEPA). For example, if management recommendations involve a Federal action that causes a site disturbance, a heritage resource inventory would have to be conducted before implementing the action. These legislative mandates require Federal land management agencies to consider the effects of its management decisions on endangered or threatened species, water quality, Indian Trust Assets, recreation, fish and wildlife, and heritage resources.

MFWP's management of lands within the WMA is restricted to those State laws, regulations, department policies, and goals and objectives governing the use of such lands. State laws to be considered include the Montana Environmental Policy Act and other State and local laws and ordinances (such as the Streambed Protection Act). Since MFWP operates on Federal lands at the reservoir, it must also comply with all Federal laws, such as NEPA.

Operating Canyon Ferry Reservoir for flood control, irrigation, power generation, and other downstream purposes limits Reclamation's ability to manage exclusively for recreation and for natural resources. Reclamation has a limited opportunity to change the historic operation of the project because of its contractual obligations to the Helena Valley Irrigation District and other users of project water, such as PPL Montana. This RMP/EA does not address changes to project water operations; therefore, existing authorities, as well as operating requirements and contractual obligations, may constrain the development of recreation facilities and the enhancement, development, and protection of natural resources.

Federal Agency Constraints

Generally speaking, the authority for Reclamation and other Federal agencies to function comes from the Property, Commerce, and Tax and Spend for the General Welfare Clauses of the Constitution. That authority, however, is granted to the Congress, not to the Executive Branch. Thus, the various agencies function on the basis of delegation of authority from the Congress in the form of statutes. The Reclamation Act of 1902, BLM's Federal Land Policy Management Act of 1976, and the USFS's National Forest Management Act of 1976 are examples of acts which delegate congressional authority to the Executive Branch. As discussed above, Section 7(c) of P.L. 89-72 is clear in delegating Reclamation authority to contract with other Federal agencies to manage Reclamation land; however, the other agency must have congressional authority and the expertise necessary to perform the responsibilities Reclamation may wish to convey. In addition, the disposition of the fees collected on Reclamation land by another Federal agency would have to be addressed. Certain fees may have to be deposited in Reclamation's treasury account, as opposed to another Federal agency's account, or deposited in the Reclamation fund as a credit to the project. In either case, the fees collected by another Federal agency would not be available for on-site use to defer the costs of operation and maintenance. Before another Federal agency can assume management responsibilities of Canyon Ferry Reservoir, certain legal questions will have to be resolved.

Environmental Constraints

Limiting factors, such as slopes, soils, wetlands, critical habitat, and the lack of an adequate land base, can constrain future development. (See figures V-7, V-8, and V-9 for areas that have limitations to development.) Facilities should not be located on unstable soils, extreme slopes, on or near wetlands and critical habitat areas, or within land areas that do not have a sufficient land base to accommodate such development (e.g., the physical carrying capacity of the land may be exceeded). The existence of any one of the following factors would make an area less suitable for recreation development:

- **R** Presence of a wetland or riparian vegetation or habitat
- **R** Sensitive habitat for certain wildlife species
- **R** Poor soils for constructing foundations and installing septic systems
- **R** Reservoir inundation zones (e.g., 100-year flood plain)
- **R** Slopes greater than 10 percent
- **R** Shoreline erosion areas, especially cliffs that are undercut by wave action
- **R** Hazardous geologic conditions, such as a fault zone

Carrying Capacity Constraints

Carrying capacity can be described as the ability of a resource to accommodate a user population at a reasonable threshold without the user population negatively affecting the resource. Carrying capacity levels for Canyon Ferry Reservoir have not been determined. Even though some public comments suggest that carrying capacity limits for some areas and facilities at certain times of the year are near their tolerable limits, the management actions to moderately increase facilities and opportunities identified in this RMP/EA should not cause any carrying capacity limitations to be exceeded within the 10-year planning period. Proper site planning, site-specific NEPA compliance, and use of Geographic Information System (GIS) mapping should identify any potential social, physical, facility, and environmental carrying capacity issues. Studies to be conducted by the University of Montana within the 10-year planning period and described later in this document will assist Reclamation in monitoring capacity levels. This monitoring will allow for corrective measures to be implemented, if necessary.

Carrying capacity can be subdivided into four categories: (1) social, (2) physical, (3) environmental (or ecological), and (4) facility.

Social Carrying Capacity: Social carrying capacity can be described as the impacts that resource users have on one another. The number, type, and location of recreation users encountered sometimes affect the recreation experience. The social carrying capacity differs among users and depends on the type of experience sought and the tolerance of the individuals or groups using the resource. For example, a recreationist seeking a wilderness experience will not tolerate the sights and sounds of other recreationists, while a user of an urban environment not only tolerates but expects to encounter other users. Social carrying capacity also depends on the availability, size, use, and management of the resource. Canyon Ferry Reservoir has a sufficient land base and adequate vegetative and topographic screening to alleviate some of the conditions that would lead to social carrying limits being reached. The challenge is to accommodate increased visitor use by dispersing users throughout the reservoir area, providing a quality recreation experience, and decreasing user conflicts. If dispersing use does not prevent user conflicts, then actions to limit use in certain areas may have to be implemented.

Physical Carrying Capacity: Physical carrying capacity can be described as the area that is available to a recreationist for a specific recreation activity. The large size of the study area should accommodate a wide variety of recreational development, activities, and users. The challenge is to provide adequate access to the public, while optimizing the number and variety of recreational opportunities within the available land base.

Environmental Carrying Capacity: Environmental (or ecological) carrying capacity can be described as the effects that a level of recreation use will have on resources such as vegetation, fish, wildlife, soils, water, and air. Activities with high impact, such as off-road vehicle use, can have a detrimental effect on natural resources. The challenge is to provide an adequate number of facilities and opportunities to meet existing and future demand without negatively impacting the environmental resources at Canyon Ferry Reservoir.

Facility Carrying Capacity: Facility carrying capacity can be described as the ability of an existing facility to accommodate the current level of recreation use. User conflicts can result if a facility has reached its carrying capacity limits. As visitation continues to increase at Canyon Ferry Reservoir, the challenge is to provide an adequate number of additional facilities within the study area to prevent existing facilities from being abused by overuse. Construction of additional facilities would also prevent future user conflicts that would likely occur as facilities reach their capacity limits.

When the social, physical, environmental, and facility carrying capacities are exceeded, the natural and human resources can be negatively affected, and the users can be displaced to substitute areas or to other recreation or nonrecreation activities. Except for peak holiday weekends, Canyon Ferry Reservoir's 9,360 land acres and 33,500 water surface acres at elevation 3797 provide an adequate area to accommodate facility expansion to meet existing and future recreation demand without exceeding the above-mentioned capacity limits. Reclamation does not plan to develop facilities to accommodate peak holiday use during the summer recreation season because those facilities would be underutilized during other times of

the year. However, it would be prudent to monitor public use to identify potential impacts and ensure that the capacity limits mentioned above are not exceeded. If negative impacts are identified, management strategies, other than those outlined in this document, will have to be considered.

Geographic Information System Constraints Mapping

GIS mapping has been used to delineate specific environmental resources within the study area. With GIS mapping, it is possible to identify areas that have constraints or limitations for development. It provides a tool to determine if suggested management actions might be compatible with the existing use of the land.

Constraints Mapping.—There are various naturally occurring phenomena and conditions that may limit or influence human activity within the study area. Although more than one management alternative will be developed for this plan, each must take into account potential associated environmental impacts. For these reasons, and for the benefit of making daily management decisions, natural constraints are mapped in figure V-9 and discussed below.

100-year flood plains. Per Executive Order 11988, these are estimated 100-year flood plains based on Federal Emergency Management Administration data. Building in flood plains is generally avoided; however, if it is not avoided, the builder must adhere to flood plain rules administered by the county. Septic tank drain fields are prohibited in flood plains, and structures must be elevated above the flood plain. Many recreational improvements, such as roads, picnic tables, and landscaping, are compatible with flood plain management.

Prime soils if irrigated. Most soil types in this designation are prime if irrigated. Soils information is taken from the Natural Resource Conservation Service soils surveys for Broadwater and Lewis and Clark Counties.

Wetlands. A vegetation survey prepared by OEA Research, 1991, showed that many shoreline areas around the reservoir meet Federal jurisdictional wetland criteria. Wetlands are not necessarily wet at all times but exhibit a combination of soils and vegetation that is influenced by water. Wetlands can be extremely productive habitat, and their uniqueness has prompted Federal regulations preventing their conversion to other uses.

Bald eagle use area. Bald eagles, which are a threatened species under the Endangered Species Act (ESA), concentrate below Canyon Ferry Dam because of spawning kokanee salmon concentrations. Eagles congregate here from October through December. The ESA protects threatened and endangered species. The Hauser Dam Bald Eagle

Management Strategy defines use restrictions for the concentration area; human activity here has been managed by a USFS-MFWP-BLM-Reclamation-Fish and Wildlife Service-PPL Montana-Lewis and Clark County management team.

Bald eagle nesting area. An active nest site in this vicinity could restrict human activity from February 15 through August 15. Cooperating agencies maintain some flexibility to change dates and strategies as more is learned about each specific situation. Recreation improvements will need to be compatible with the eagles' territorial needs to minimize disturbance of the young.

Bald eagle spring use area. From March 1 through April 15, the spring migration of bald eagles congregates to feed and rest in this area. Generally, recreation uses here, such as ice fishing and ice boating, would not conflict since the eagles would not use the area until after the ice thaws.

Bald eagle potential nesting habitat. Area wildlife managers agree that the Missouri River delta appears to be the most suitable habitat remaining on the reservoir for attracting nesting pairs of bald eagles. If bald eagles did expand into this area, use restrictions could be considered between February 15 and August 15.

Noise-sensitive areas. Use of loud recreational or other mechanized equipment, in combina-tion with the narrow topography at Magpie, Cave, and Canyon Ferry Village Bays, results in noise conflicts between recreationists and cabin site users as well as recreationists using campgrounds and day-use areas.

Critical mule deer winter range. Mule deer depend on this area from about mid-November to mid-March. Critical winter range provides preferred forage and is often open when other areas are snow covered. Area managers propose that recreational development be restricted to those uses that are compatible with winter range and that minimize disturbance to deer.

Waterfowl staging areas. Staging is the phenomenon of waterfowl gathering before spring and fall migrations. On Canyon Ferry Reservoir, major staging bays are at Avalanche and Duck Creeks. In the spring, birds are present from the time the ice leaves the reservoir until about mid-April. In the fall, staging takes place from early-September until freezeup. Wildlife managers are concerned that these areas may need seasonal use restrictions for onshore and offshore uses and prefer that the shoreline remains roadless, when possible.

Waterfowl brooding areas. Brooding (raising of young) takes place at Beaver Creek and on the WMA. The critical waterfowl brooding period is from the first of May until mid-July, when the young birds take flight.

Trout spawning habitat. MFWP has made considerable investment in maintaining adequate spawning habitat in Confederate Bay and Creek. The tailrace of the powerplant and both sides of the shoreline below the dam in the study area are spawning areas for kokanee salmon and rainbow and brown trout. Potential trout spawning habitat exists at Beaver, Duck, and Magpie Creeks. Concerns in these areas pertain to damage to riparian vegetation, diminished water quality, and providing inadequate enforcement to stop illegal killing of spawning trout. Any dredging near shallow stream inlets should be avoided.

Critical antelope range. Antelope depend on this area year round. As habitat has diminished, due to both residential and recreational development, undeveloped areas have become more critical to antelope survival. The prime considerations of area managers are that Silos Recreation Area be defined and motorized vehicle use be restricted to maintain as much open space as possible within the range.

Increased rural development has caused conflicts, especially between antelope hunters and rural residents. With antelope herds on both sides of the reservoir and the potential for increased development on adjacent private lands, these conflicts are expected to worsen. Increased development on public lands has the potential to displace wildlife from those areas to private lands. Although this would decrease the safety concerns on public lands during the hunting season, it increases the concerns of private landowners, removes public lands from the habitat base, and makes it more difficult to manage antelope populations.